## Whiteman AFB Annual Consumer Report on the Quality of Tap Water for 2002

This is an annual report on the quality of water delivered by Whiteman AFB. We continually monitor the drinking water for contaminants. Our water is safe to drink.

the Consumer Under Confidence Reporting Rule of the federal Safe Drinking Water Act (SDWA). community water systems are required to report this water quality information to the consuming public. Presented in this report is information on the source of our water, its constituents and the health risks associated with any There contaminants. were no contaminant level, monitoring treatment technique violations for this reporting period.

Your drinking water comes from the Whiteman AFB Water Treatment Plant operated by 509th Civil Engineering Squadron. Our system has been assigned the identification number MO 1079501. The plant treats water from the Ozark Aquifer pumped from wells located on base. Your water is filtered and treated with chlorine to disinfect the water. These wells have been tested and the results are available from the 509th Medical Support Squadron, Bioenvironmental Engineering Element If you would like to (687-4324). observe the decision-making processes that affect your drinking water quality or if you have any questions, the water plant can be reached at 687-1984.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels

over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- ★ Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- ★ Inorganic contaminants, such as salts and metals, which can be naturallyoccurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- ★ Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- ★ Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- ★ Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities

In order to ensure that tap water is safe to drink, EPA prescribes regulations

which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please direct questions to Lt Horenziak or SSgt Houey at the 509th Medical Operations Squadron, Bioenvironmental Engineering Element (687-4324).

## **Table of Detected Contaminants**

Contaminant	MCLG	MCL	Units	Level Found	Range	Violation	Sample Date (Latest)	Typical Source of Contamination/Remarks				
Microbial												
Total Coliform	0	≤ 5	% positive samples	0 %	N/A	No	weekly	Natural bacteria present in the environment				
Turbidity	N/A	TT	NTU	0.047	0.0 – 0.20	No	12x daily	Soil Runoff/Indicator of filtration efficiency				
Inorganic	Inorganic											
Asbestos	7	7	MFL	2	0-2	No	5/4/00	Decay of asbestos cement water mains				
Barium, Dissolved	2	2	ppm	0.0222	0.0224	No	6/4/99	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits				
Copper	1.3	AL= 1.3	ppm	90% value 0.092	0.0078- 0.108	No	6/13/01 6/18/01	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservative				
Fluoride	4.0	4.0	ppm	0.56	N/A	No	6/4/99	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories				
Lead	0.015	AL= 0.015	ppm	90% value 0.004	0.004	No	6/13/01 6/18/01	Corrosion of household plumbing systems; Erosion of natural deposits				

Organic											
Total	0	100	ppb	5.0	0.7-5.0	No	5/4/00	By-product of drinking water chlorination			
Trihalomethanes											
Radiological											
Gross Alpha	0.0	15.0	pCi/L	4.9	N/A	No	11/6/00	Erosion of natural deposits			
Beta (Total)	0	4.0	mRem/yr	1.0±2.8	N/A	No	6/17/98	Decay of natural and man-made deposits			
Unregulated											
Sulfate	250	N/A	ppm	39.5	39.5	No	6/4/99	Erosion of natural deposits			
Radon	N/A	N/A	pCi/L	33.4±10.8	N/A	No	5/8/98	Natural deposits of uranium			

## **Definitions of Key Terms**

<u>Maximum</u> <u>Contaminant</u> <u>Level</u> <u>Goal</u> <u>(MCLG)</u> - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

<u>Maximum Contaminant Level (MCL)</u> - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

<u>Million fibers per liter (MFL)</u> - Millions of asbestos fibers per liter of water.

<u>Variances and exemptions</u> - State or EPA permission not to meet an MCL or treatment technique under certain conditions.

Parts per billion (ppb) or Micrograms per liter (μg/L) - One part per billion corresponds to one part (amount) per billion parts. As an example, a single dollar in \$1,000,000,000 is 1 ppb.

<u>Picocuries per liter (pCi/L)</u> - Picocuries per liter is a measure of the radioactivity in water.

<u>Milliroentgens equivalent man per year</u> (<u>mRem/yr</u>) - Milliroentgens equivalent man per year is an estimated dose of beta radiation to a human.

Parts per Million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one part (amount) per million parts. As an example; a single dollar in \$1,000,000 is 1 ppm.

<u>Action Level (AL)</u> - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

<u>Treatment Technique (TT)</u> - A required process intended to reduce the level of a contaminant in drinking water.

<u>Nephelometric Turbidity Units (NTU)</u> - A measure of the cloudiness of water.

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